Amendments to the Claims

The following listing of claims will replace all prior versions and listings of claims in the application.

- 1. (Currently Amended) A ladder configured to be carried by at least one human user, said ladder comprising:
 - a plurality of legs, each defined by a first end and a second end;
 - a plurality of rungs disposed between said legs; and
 - a tip warning system comprising:
 - at least one of an audio alarm or a visual alarm;
 - a power source to energize said at least one alarm;
 - at least one a plurality of weight sensors, coupled to at least one each cooperative with a corresponding one of said plurality of legs or rungs; and
 - a controller signally coupled to said at least one weight sensors such that upon attainment of a predetermined signal threshold generation of a weight signal in each of said weight sensors, said controller compares differences in said signals to determine a measure of imbalance in said ladder, said tip warning system provides and provide, upon attainment of a measure of said imbalance that exceeds a predetermined signal threshold, notorious indicia to said human user through said at least one alarm.
- 2. (Currently Amended) The ladder of claim 1, wherein said at least one weight sensors is are disposed adjacent said first end.
- 3. (Currently Amended) The ladder of claim 2, wherein said at least one weight sensors is are disposed beneath said first end such that when said first end is placed upon a ladder-supporting surface, said at least one weight sensor can measure a weight imposed thereon by at least said ladder.

- 4. (Cancelled)
- 5. (Cancelled)
- 6. (Cancelled)
- 7. (Cancelled)
- 8. (Currently Amended) The ladder of claim 6 1, wherein said measure of imbalance measure is a sensed ratio that exceeds a predetermined maximum comprises a ratio of said differences in said sensed weight signals divided by a sum of said sensed weight signals.
- 9. (Cancelled)
- 10. (Original) The ladder of claim 1, wherein said controller comprises analog comparators.
- 11. (Original) The ladder of claim 1, wherein said controller comprises at least one digital microprocessor.
- 12. (Original) The ladder of claim 1, further comprising a movable counterbalancing weight coupled to said ladder, said counterbalancing weight responsive to said controller.
- 13. (Original) The ladder of claim 12, wherein said counterbalancing weight is mechanically adjustable.
- 14. (Original) The ladder of claim 12, wherein said counterbalancing weight is manually adjustable.
- 15. (Original) The ladder of claim 1, wherein said power source comprises a battery.

- 16. (Original) The ladder of claim 1, wherein said power source comprises a solar cell.
- 17. (Original) The ladder of claim 1, wherein said ladder is a stepladder.
- 18. (Original) The ladder of claim 1, wherein said ladder is an extension ladder.
- 19. (Original) The ladder of claim 1, wherein said at least one alarm comprises said audio alarm and said visual alarm.
- 20. (Original) The ladder of claim 19, wherein at least one of said alarms is disposed adjacent said second end.
- 21. (Original) The ladder of claim 19, wherein said visual alarm comprises at least one light.
- 22. (Original) The ladder of claim 21, wherein said at least one light comprises a plurality of lights.
- 23. (Original) The ladder of claim 22, wherein each of said plurality of lights corresponds to particular ladder safety category.
- 24. (Original) The ladder of claim 23, wherein said plurality of lights comprise:
- a first light to indicate at least one of system operational status or a first of said ladder safety category;
 - a second light to indicate a second of said ladder safety category; and a third light to indicate a third of said ladder safety category.
- 25. (Original) The ladder of claim 19, wherein said visual alarm comprises at least one display.

- 26. (Original) The ladder of claim 1, wherein said at least one alarm comprises said audio alarm.
- 27. (Original) The ladder of claim 26, wherein said audio alarm comprises a buzzer.
- 28. (Currently Amended) The ladder of claim 27 26, wherein said buzzer audio alarm is configured to vary an acoustic output that corresponds to particular ladder safety category.
- 29. (Original) The ladder of claim 28, wherein said varied acoustic output comprises:
- a first sound to indicate at least one of system operational status or a first of said ladder safety category;
 - a second sound to indicate a second of said ladder safety category; and a third sound to indicate a third of said ladder safety category.
- 30. (Original) The ladder of claim 29, wherein said first, second and third sounds comprise tones of successively higher frequency, respectively.
- 31. (Original) The ladder of claim 26, wherein said audio alarm comprises a prerecorded voice warning.
- 32. (Currently Amended) A tip-sensing ladder comprising:
 - a plurality of legs defined by a first end and a second end;
- a plurality of rungs disposed between said legs to define a climbing path between said first and second ends; and
 - a tip warning system, said system comprising:
 - a plurality of weight sensors, each cooperative with coupled to at least a corresponding one of said plurality of legs or rungs;
 - a controller signally coupled to said weight sensors;
 - a plurality of alarms comprising an audio alarm and a visual alarm, said alarms responsive to said controller such that upon generation of a weight signal

in each of said weight sensors, said controller compares differences in said signals to determine a measure of imbalance in said ladder and provide, upon attainment of a measure of said imbalance that exceeds a predetermined signal threshold, notorious indicia to a user through said at least one alarm attainment of a predetermined signal threshold therein, at least one of said alarms activates; and

a power source to energize at least said plurality of alarms.

- 33. (Currently Amended) A method of using a ladder, said method comprising: configuring a ladder to comprise:
 - a plurality of legs;
 - a plurality of rungs disposed between said legs; and
 - a tip warning system comprising:

an audio alarm and a visual alarm;

a power source to energize at least said audio and visual alarms;

at least one a plurality of weight sensors, each coupled to at least a respective one of said plurality of legs or rungs; and

a controller signally coupled to said at least one weight sensors such that upon attainment of a predetermined signal threshold based on a difference in measured signals from said weight sensors, said tip warning system provides notorious indicia to a human user climber through at least one of said alarms;

placing said tip warning system in an operational condition;

placing said ladder against a ladder engaging surface;

climbing said ladder such that indicia is provided to a <u>said</u> climber thereof to indicate at least one of an operational status or a ladder safety category, <u>said ladder safety category comprising at least a first ladder safety category indicative of no imminent tipping and a second ladder safety category indicative of a possible tipping condition.</u>

34. (Cancelled)

35. (New) The method of claim 33, wherein said at least one weight sensor comprises a

plurality of weight sensors, each cooperative with a corresponding one of said plurality of legs or

rungs such that upon generation of a weight signal in each of said weight sensors, said controller

compares differences in said signals to determine a measure of imbalance in said ladder and

provide, upon attainment of a measure of said imbalance that exceeds said predetermined signal

threshold, said notorious indicia.

36. (New) The method of claim 33, wherein said plurality of legs comprises no more than

two legs.

37. (New) The method of claim 35, wherein said measure of imbalance comprises calculating

a ratio of said sensed weight signal differences divided by a sensed weight sum.

38. (New) The ladder of claim 1, wherein said plurality of legs comprises no more than two

legs.

- 9 -